

12. Resource Adapter

The Java EE Connector Architecture (JCA) specification defines a standard architecture for connecting the Java EE platform to enterprise information systems (EISs).

A JMS provider is required to include a resource adapter which connects to that JMS provider and which conforms to the Java EE Connector Architecture specification and as further specified in this chapter. Such a resource adapter is referred a "JMS standard resource adapter".

The version of the Java EE Connector Architecture specification which should be used is 1.6.

This chapter is not intended to prevent the creation and use of additional resource adapters for connecting to a JMS provider which do not conform to the specifications in this chapter. However Java EE applications which use such resource adapters may be less portable.

12.1. ActivationSpec properties

A JMS standard resource adapter must support the ActivationSpec JavaBean properties defined in the following table. It may support additional properties in addition to those listed.

Table 12.1 ActivationSpec properties that a JMS standard resource adapter must support

ActivationSpec property	Description
<code>destinationLookup</code>	This property may be used to specify the lookup name of an administratively-defined <code>javax.jms.Queue</code> or <code>javax.jms.Topic</code> object which defines the JMS queue or topic from which the endpoint (message-driven bean) is to receive messages.
<code>connectionFactoryLookup</code>	This property may be used to specify the lookup name of an administratively-defined <code>javax.jms.ConnectionFactory</code> , <code>javax.jms.QueueConnectionFactory</code> or <code>javax.jms.TopicConnectionFactory</code> object that will be used to connect to the JMS provider from which the endpoint (message-driven bean) is to receive messages.
<code>acknowledgeMode</code>	<p>If bean-managed transaction demarcation is used, this property may be used to indicate whether JMS <code>AUTO_ACKNOWLEDGE</code> semantics or <code>DUPS_OK_ACKNOWLEDGE</code> semantics should apply.</p> <p>This property may be set to either <code>Auto-acknowledge</code> or <code>Dups-ok-acknowledge</code>. If this property is not specified, a default of <code>Auto-acknowledge</code> will be used.</p>
<code>messageSelector</code>	This property may be used to specify a message selector. If this property is not specified then a message selector will not be used.

ActivationSpec property	Description
<code>destinationType</code>	This property may be used to specify whether the specified destination is a queue or topic. The valid values are <code>javax.jms.Queue</code> or <code>javax.jms.Topic</code> .
<code>subscriptionDurability</code>	<p>This property only applies to endpoints (message-driven beans) that receive messages published to a topic. It may be used to specify whether the subscription is durable or non-durable.</p> <p>This property may be set to either <code>Durable</code> or <code>NonDurable</code>. If this property is not specified, a default of <code>NonDurable</code> will be used.</p>
<code>clientId</code>	<p>This property may be used to specify the client identifier that will be used when connecting to the JMS provider from which the endpoint (message-driven bean) is to receive messages.</p> <p>If this property is not specified then the client identifier will be left unset.</p>
<code>subscriptionName</code>	<p>This property only applies to endpoints (message-driven beans) that receive messages published to a topic. If the <code>subscriptionDurability</code> property has been used to specify that the subscription is durable then the <code>subscriptionName</code> property may be used to specify the name of the durable subscription.</p> <p>If a durable subscription is specified but <code>subscriptionName</code> is not specified then the resource adapter will set the name of the durable subscription to be a name which is unique to the deployed MDB. If the message-driven bean is deployed into a clustered application server then the <code>shareSubscriptions</code> property will be used to determine whether the durable subscription name generated by the resource adapter will be the same or different for each instance in the cluster.</p>

ActivationSpec property	Description
shareSubscriptions	<p>This property only applies to message-driven beans that receive messages published to a topic and are deployed into a clustered application server.</p> <p>If a durable subscription is specified but <code>subscriptionName</code> is not specified then the <code>shareSubscription</code> property may be used to specify whether the durable subscription name generated by the resource adapter should be the same or different for each instance in the cluster.</p> <p>If a non-durable subscription is specified then the <code>shareSubscription</code> property may be used to specify whether each instance in the cluster should use the same shared non-durable subscription or whether each instance should use a separate non-shared subscription.</p> <p>This property may have the string values <code>true</code> or <code>false</code>.</p> <p>A value of <code>true</code> means that the same durable or non-durable subscription will be used for each instance in the cluster.</p> <p>A value of <code>false</code> means that a different durable or non-durable subscription will be used for each instance in the cluster.</p> <p>By default a value of <code>true</code> is assumed.</p>